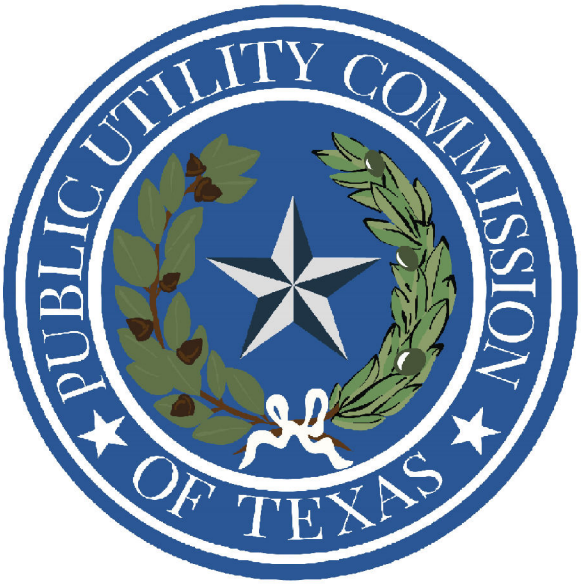

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PROJECT NO. 52373

REVIEW OF WHOLESALE ELECTRIC MARKET DESIGN	**§ §**	**PUBLIC UTILITY COMMISSION OF TEXAS**

PROJECT NO. 52268

CALENDAR YEAR 2021 – WORKSHOP AGENDA ITEMS WITHOUT AN ASSOCIATED CONTROL NUMBER	**§ § § §**	**PUBLIC UTILITY COMMISSION OF TEXAS**

COMMENTS OF EV.ENERGY CORP

INTRODUCTION:

EV.ENERGY CORP ("ev.energy") appreciates the opportunity to provide responses to the set of questions posed by the Texas Public Utilities Commission ("PUCT" or "Commission") on August 2, 2021 in the Project No. 52313 proceeding as the Commission considers modifications to Texas' wholesale electric market design. We support any effort to improve the market for residential demand response ("DR"), where opportunities for residential customer and third-party participation in DR lag far behind the number of potential distributed resources (including over 50,000 electric vehicles ("EVs") in Texas, representing as much as 550 MW of controllable load).[1]

KEY RECOMMENDATIONS:

1. The PUCT should set a goal of developing residential DR programs (including EV-specific managed charging programs) that total at least 10% of system residential

[1] Estimates of electric vehicle registrations are available at https://afdc.energy.gov/data/10962.

peak load, and appropriately incentivize the Retail Electric Providers ("REPs") to deploy, administer and grow these programs; and,

2. The PUCT should increase the Emergency Response Service ("ERS") size and budget to fairly compensate aggregators for the system benefits they provide, in order to incentivize both aggregators and energy consumers to participate in DR programs.

We expand on these recommendations by responding to questions 4 and 5.

ABOUT EV.ENERGY:

Ev.energy is a leading software platform that manages EV charging for residential customers. Operating in Texas and across all other 49 U.S. states, we provide an end-to-end solution for utilities, grid operators and retailers to directly control residential EV load through a suite of Application Programming Interface ("APIs") that connect to both vehicles and Electric Vehicle Supply Equipment ("EVSEs").

Ev.energy works by receiving dispatch signals from utilities, retailers, and grid operators such as the Electric Reliability Council of Texas ("ERCOT"), and utilizing vehicle and EVSE APIs to curtail charging on all connected devices to deliver demand reduction during the specified window. Beyond demand response, ev.energy can also actively manage the customer's charging and schedule it for off-peak periods on their time-of-use rate, delivering system benefits while ensuring the customer maximizes energy bill savings.

Over 80% of EV drivers on our platform adhere to managed charging each day, which we achieve through an award-winning mobile app that can be white-labelled to the REP and that provides the customer with transparency and control over their EV charging schedule, consumption/costs, battery level and health, and the ability to opt out of demand response events

if needed. In Texas, we reliably deliver approximately 1.4 kW of load reduction per EV during ERS events.

RESPONSE TO QUESTIONS:

4. *Is available residential demand response adequately captured by existing retail electric provider (REP) programs? Do opportunities exist for enhanced residential load response?*

No, there are currently limited opportunities for residential customers, especially those that drive electric vehicles, to participate in demand response programs through REPs. Very few REPs in Texas offer DR programs, and an even smaller percentage offer EV-specific DR programs despite growing EV adoption by Texans.

A limited number of REPs currently offer residential load management or demand response programs, and even fewer offer EV-specific programs. To address this, we recommend the PUCT set a goal of developing EV-specific load management and/or demand response programs that total at least 10% of system residential peak load. REPs can help Texas meet this goal by developing their own DR programs, and to incentivize urgent action we recommend that REPs receive financial compensation as a bonus that scales with the size of the DR program developed by the REP.

Moreover, the DR programs that *do* currently exist often preclude customer participation due to onerous participation requirements or limited financial incentives. For example, programs that require the customer to purchase expensive hardware, such as a networked L2 charger, block the participation of those customers that either cannot afford the L2 charger, or whose home wiring does not support L2 charging. This preclusion of customers occurs even though there are other methods for expanding customer participation that already exist in the market today.

Vehicle telematics and networked Level 1 charging cables are two such examples of solutions that are already available to consumers for a fraction of the price of an L2 charger, and enable residential customer participation just as readily in an EV charging program. In spite of this available technology, the few residential DR programs that exist in Texas currently exclude these customers from participation and therefore unnecessarily reduce the total addressable load the REP can control.

5. *How can ERCOT's emergency response service program be modified to provide additional reliability benefits? What changes would need to be made to Commission rules and ERCOT market rules and systems to implement these program changes?*

The biggest change to ERCOT's ERS program should be to commensurately align incentives with grid needs.

Procurement conducted through ERS is currently done based on a budgetary cap of about $50 million that is entirely divorced from the system's actual reliability needs. Not only does this prevent significant aggregator investment in launching and scaling up programs to participate in the ERS, but it also devalues each incremental MW that is cleared in the ERS. An increase in the quantity of MW clearing in the ERS decreases the individual value of that MW, driving down the margins for aggregators, and also driving down the interest and uptake in ERS participation.

The first approach to addressing this misaligned market incentive is to simply increase the ERS budget to align with actual system needs. In February 2021, there was a shortfall of over 50 GW, indicating an extreme system need. But the artificial constraints of the ERS size prevented additional flexible load from being made available, even though there were millions of distributed resources, including tens of thousands of EVs, that were functionally able to participate in the ERCOT market and to curtail load in response to a dispatch signal and financial

incentive. We recommend that the size and budget of the ERS be increased until it is able to meaningfully assist the above-mentioned goal of DR programs that total at least 10% of system residential peak load.

The second approach to fix ERS incentives is to pay fair market value for provided energy. During the February 2021 storm, prices were sustained at the $9,000/MWh price cap for over four days. Yet the prices that cleared in the ERS (for the auction run prior to the February storm) equated to well below the actual ERCOT prices during the storm. To address this gap, ERS resources should receive greater incentives (such as incentives mapped to the Operating Reserve Demand Curve ("ORDC")) when deployed.

CONCLUSION:

Ev.energy thanks the Commission and all other parties for thoughtful consideration of its comments. We look forward to continuing to engage with stakeholders at this critical juncture in the Texas wholesale electricity market. Please contact me with any questions.

Dated: August 16. 2021

Sincerely,

Joseph Vellone

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